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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/993,668	11/27/2001	Warren M. Sutton	P67041US0	8022

136 7590 10/07/2002

JACOBSON HOLMAN PLLC
400 SEVENTH STREET N.W.
SUITE 600
WASHINGTON, DC 20004

EXAMINER

COHEN, AMY R

ART UNIT PAPER NUMBER

2859

DATE MAILED: 10/07/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/993,668

Applicant(s)

SUTTON, WARREN M.

Examiner

Amy R Cohen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because it exceeds the maximum length of 150 words. Correction is required. See MPEP § 608.01(b).

2. The disclosure is objected to because of the following informalities:

Page 23, line 5 "RoboVector™" should read --ROBOVECTOR--, the quotation marks and trademark symbol are no longer used to indicate a trademarked item in an application.

Appropriate correction is required.

Claim Objections

3. Claim 12 is objected to because of the following informalities:

Lines 3-4, "a pair of laser beam emitting devices" and "multiple points" lack proper antecedent basis in the claims.

Appropriate correction is required.

4. Claim 14 is objected to because of the following informalities:

Claim language is confusing because "reference markings" is claimed in line 2, however, a reference marking, singular, is claimed in lines 4-5 and 7.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 2, 6, and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Ytterberg et al. (U. S. Patent No. 5,859,783).

Ytterberg et al. teaches an apparatus (400) for locating a point on one surface and indicating a corresponding point on another surface comprising a mobile base (402) having an indicator (416) thereon to position the base in predetermined relation to a point on one surface (Col 9, lines 26-37) and a light beam emitting device (406) mounted on said base in a predetermined relation to said indicator (Col 9, lines 59-65) to emit a light beam to impinge on another surface to indicate a point on said another surface corresponding to the point on said one surface.

Ytterberg et al. teaches the apparatus wherein said base is a wheeled mobile cart (Fig. 6) having a handle (402) to enable manual movement to a desired location on said one surface to position said indicator in alignment with said point on said one surface (Col 8, lines 1-21).

Ytterberg et al. teaches the apparatus wherein said light beam emitting device is a laser beam emitting device (406).

Ytterberg et al. teaches the apparatus wherein said base includes a linear measuring device to indicate linear movement of said base along said one surface (Col 8, lines 40-61 and Col 9, lines 26-65).

7. Claims 1, 4, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Bozzo (U. S. Patent No. 5,782,003).

Bozzo teaches an apparatus (Fig. 1) for locating a point on one surface and indicating a corresponding point on another surface comprising a mobile base (1) having an indicator (18)

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thereon to position the base in predetermined relation to a point on one surface (Col 4, lines 51-59) and a light beam emitting device (25) mounted on said base in a predetermined relation to said indicator (Figs. 1 and 7) to emit a light beam to impinge on another surface to indicate a point on said another surface corresponding to the point on said one surface (Col 3, lines 3-16).

Bozzo teaches the apparatus wherein said base includes a support (29) mounted thereon by a leveling structure and at least one bracket (27) on said support to support said light beam emitting device on said support (Figs. 20-22).

Bozzo teaches the apparatus wherein said base includes a leveled top member (3), a drum mounted on said top member (3 and Col 4, lines 28-31), said drum facing upwardly and including a 360° protractor (6) on its upper surface, a pivot arm (19) mounted on said drum and including a pointer (7) associated with said protractor to indicate movement of the pivot arm in a horizontal plane about a vertical axis, and a laser beam emitting device (25) mounted on said pivot arm for indicating arcuate, curved lines on said another surface in a horizontal and vertical plane (Figs. 1 and 7 and Col 9, line 65-Col 10, line 17 and Col 2, lines 7-15).

8. Claim 14 is rejected under 35 U.S.C. 102(b) as being anticipated by Costales (U. S. Patent No. 5,644,850).

Costales teaches an apparatus (10) for identifying target points on an overhead surface (20) from reference markings (16) on a floor surface (18) which comprises a mobile support structure (14) having an indicator (24) thereon to position said support structure in a fixed relation to a reference marking on said floor surface and at least one laser (24) to identify a target point on said overhead surface at a predetermined location with respect to said reference marking (Fig. 1).

9. Claims 1, 3, and 16-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohtomo et al. (U. S. Patent No. 5,819,424).

Ohtomo et al. teaches an apparatus (2) for locating a point on one surface and indicating a corresponding point on another surface comprising a mobile base (2) having an indicator (8 and 9) thereon to position the base in predetermined relation to a point on one surface (Col 1, line 49-Col 2, line 5) and a light beam emitting device (12) mounted on said base in a predetermined relation to said indicator (Figs. 1 and 2) to emit a light beam (10a and 10b) to impinge on another surface to indicate a point on said another surface corresponding to the point on said one surface (Figs. 2 and 8).

Ohtomo et al. teaches the apparatus wherein said indicator includes a pair of spaced aligned pointers (8 and 9) for positioning in alignment with a reference line (6 and 7) on said one surface.

Ohtomo et al. teaches a method for identifying target points on a ceiling surface with respect to one or more reference markings (6 and 7) on a floor surface which comprises the steps of tracking a reference line or markings on a floor surface of a building floor with a mobile apparatus (Col 1 line 49-Col 2, line 5) and, at appropriate intervals, identifying target locations on an overhead ceiling or surface of said building floor by focusing vertical laser beams (10 a and 10b) to said target locations by one or more lasers properly positioned on said mobile apparatus (Col 6, lines 15-52).

Ohtomo et al. teaches the method for identifying target points wherein at least one laser is fixed (31) on said mobile apparatus and at least one laser is laterally adjustable (35) on said mobile apparatus (Col 5, line 64-Col 6, line 12).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ytterberg et al. in view of Watts (U. S. Patent No. 4,137,638).

Ytterberg et al. discloses the apparatus as described above in paragraph 6 and, although, not explicitly stated, the rear wheels (410) as shown in Fig. 6, are connected by a transverse axle.

Ytterberg et al. does not disclose a second front wheel.

Watts discloses an apparatus (20) comprising a mobile base (22) wherein said base includes a frame supported by a pair of rear wheels (50 and 52) rotatably supported by a transverse axle (54) mounted on said frame (Fig. 1) and a pair of caster front wheels (44 and 46) to enable movement of said base along a support surface (Col 4, lines 7-22).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Ytterberg et al. to include a pair of caster front wheels, as taught by Watts, so that the device would be supported on four wheels and so that the front steering wheels would be connected axially to ensure that the wheels remain upright.

12. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ytterberg in view of Brunson (U. S. Patent No. 6,145,207).

Ytterberg discloses the apparatus as described above in paragraph 6.

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Ytterberg does not disclose an apparatus wherein said linear measuring device is a resettable electronic device convertible between U. S. and metric measurement units.

Brunson discloses a measuring device wherein said device is a resettable electronic device convertible between U. S. and metric measurement units (Fig. 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Ytterberg to include a measurement unit converter, as taught by Brunson, so that a user could read a distance measured in either U. S. or metric measurement units for use in all countries.

13. Claims 1, 4, 8, 9, 11, 13, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hervey (U. S. Patent No. 15,040) in view of Bozzo.

Hervey discloses an apparatus for locating a point on one surface and indicating a corresponding point on another surface comprising a mobile base (Fig. 1) having an indicator (D) thereon to position the base in a predetermined relation to a point on one surface and a light emitting device mounted/sight (S) on said base in a predetermined relation to said indicator (Fig. 1) to indicate a point on said another surface/target corresponding to the point on said one surface (Col 1, lines 16-28 and Col 3, lines 50-65).

Hervey discloses the apparatus wherein said sight includes a pair of sights (S and S') laterally adjustably supported (Fig. 1) from said base to enable multiple points/targets on said one surface to be indicated on said another surface, wherein said sights (S and S') are supported on a pair of parallel, laterally adjustable support arms (R and I) with sights mounted on each support arm for transmitting multiple targets to said another surface (Fig. 1), and wherein each of

said support arms includes a tape measure associated therewith to indicate the scope of lateral movement of the sight devices mounted on said support arms (Fig. 1).

Hervey does not disclose that the sights be laser beam emitting devices which can emit laser beams on an overhead surface.

Bozzo discloses the laser beam emitting device as described above in paragraph 7.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the sight apparatus of Hervey to replace the sights with laser beam emitters which can produce laser beams on an overhead surface, as taught by Bozzo, so that a user could indicate targets more accurately and faster since the user would no longer have to look through and adjust a telescope to focus on a target.

14. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ytterberg et al. in view of Thomson (U. S. Patent No. Re.36,257).

Ytterberg et al. discloses the apparatus as described above in paragraph 6 and, although not explicitly stated, the base member includes a level top member (Figs. 6 and 7).

Ytterberg et al. does not disclose an apparatus comprising a second laser beam emitting device and respective cradle mounted on the top member for indicating multiple points on said another surface.

Thomson discloses an apparatus (10) wherein the base includes a leveled top member (Fig. 2), a pair of laser beam emitting devices and respective cradles (12 and 14) for indicating multiple points on said another surface (Col 2, lines 27-61).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Ytterberg et al. to include a second laser beam emitting

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device, as taught by Thomson, so that a user of the apparatus would have multiple laser beams projected for use in alignment of multiple objects.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents disclose sighting devices Wu et al. (U. S. Patent No. 5,983,510), Rando (U. S. Patent No. 5,872,657), Rando (U. S. Patent No. 5,784,793), Kirven (U. S. Patent No. 4,471,530), Reed (U. S. Patent No. 3,776,496), Milburn, Jr. (U. S. Patent No. 3,737,232), and Murphy (U. S. Patent No. 1,048,570).

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amy R Cohen whose telephone number is (703) 305-4972. The examiner can normally be reached on 8 am - 5 pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on (703) 308-3875. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-3431.

ARC
October 1, 2002



Diego Gutierrez
Supervisory Examiner
Tech Center 2800